## **Educational Services**

**Emerson Pressure Management Training Catalog 2023** 





## Introduction

In an ever-changing world you need solutions. Whether it is employee turnover and new hire training or just the need for a refresher course, you need a company to deliver hands-on quality education to your staff.

We trust you will find that we are that company. Our trained educators offer hands-on classes for both beginners and seasoned employees, as well as training that can be customized to your specific needs. Browse our catalog for the 2023 options at our facilities. For a customized training at your location or company site, contact your local Emerson Impact Partner and they will work with us to prepare the perfect class for you.

Let us know how we can help!

Emerson Automation Solutions
Education Department
3200 Emerson Way
McKinney, TX 75069
972-548-3534

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# 2023 Calendar

DATE	COURSE CODE - SCHOOL	LOCATION	PRICE
March 6-10	8000 – Gas Control Conference	McKinney, TX	\$2100 USD
April 4-6	1100 – Gas Regulator Technician	McKinney, TX	\$2100 USD
May 16-18	1106 – Gas Regulator Troubleshooting	McKinney, TX	\$2100 USD
June 6-8	1100 – Gas Regulator Technician	Marshalltown, IA	\$2100 USD
June 13-15	1106 – Gas Regulator Troubleshooting	Marshalltown, IA	\$2100 USD
August 22-24	1112 - Fisher <sup>TM</sup> LPG-NH <sub>3</sub> Technical Course	McKinney, TX	\$250 USD
September 19-21	1100 – Gas Regulator Technician	McKinney, TX	\$2100 USD
October 3-5	1114 – PRV University	Stafford, TX	\$2100 USD
October 17-19	1106 – Gas Regulator Troubleshooting	McKinney, TX	\$2100 USD
October 23-27	8000 – Gas Control Conference	McKinney, TX	\$2100 UDS



### **Maximize Your Investment with Educational Services**

#### **Educational Services School Information**

#### **Technical Training**

Customers and end users of Pressure Management product lines are encouraged to enroll in any of our technical classes in our current calendar offering. These are taught by certified instructors and include extensive hands-on sessions with our products. We offer technical seminars in Natural Gas and Industrial regulators, LP regulators, and Pressure/Vacuum Relief Equipment.

Contact your local Emerson Impact Partner or Distributor for more details and to discuss which class is right for you.

Enroll at https://mytraining.emerson.com

#### **Site Schools**

A very popular option is a Site School. Some of our Technical classes can be customized and offered at your customer site or office. We currently offer Site Schools for Natural Gas and Industrial Regulators, and send our certified instructors to you.

Work with your Emerson Impact Partner to discuss your needs. They will tailor a school with our team using the products specific to your company, with unique learning objectives identified.

Our calendar fills up very quickly for Site Schools, so don't delay!

#### **Contact Us**

#### **McKinney Education Department**

To inquire about Pressure Management training, for questions about enrollment, or to start a conversation about hosting a Site or Local school, call us at 972-548-3534.

#### **Emerson Education Group**

For questions about your MyTraining account, log-on problems, or for financial questions related to payment for a technical class, call 1-800-338-8158 or email Education@Emerson.com.



## **Course e7601: Principles of Self-Operated Regulators**

## Learn the fundamentals of pressure reducing regulators at your own pace

#### Overview

This approximately 30-minute course introduces self-operated regulator fundamentals for those with newly assigned responsibilities for regulator selection, maintenance, or procurement.

Upon completion of this course, students will be able to:

- Describe the construction components and operating principles behind most self-operated regulators
- Describe how changing some of these components will increase or decrease a regulator's performance for a given application
- Develop the vocabulary necessary to describe the parts and working principles of self-operated regulators

#### **Topics**

Regulator History | Regulator Design Elements (Restricting, Loading, and Measuring Elements; Springs; Orifices; Diaphragms; Pitot Tubes) | Regulator Fundamentals (Setpoint, Droop and Boost, Accuracy, Capacity, Lockup) | Regulator Performance (How to Maximize Performance, Design Considerations)

#### Registration

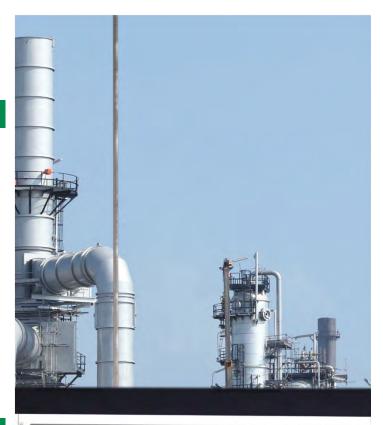
Price: \$50 USD

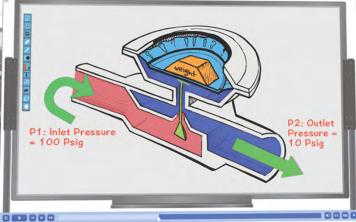
**Enroll:** Log on to Educational Services <u>MyTraining</u> at www.Emerson.com/education

**Contact:** For more information, contact your Emerson Impact Partner or explore training options at www.Emerson.com/education.

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### **Course 1100: Gas Regulator Technician**

Choose a hands-on learning platform and train for realworld challenges. 1100 Series: Gas Regulator Technician and Troubleshooting Courses

#### Overview

This 3-day course is designed primarily for technicians responsible for the installation and maintenance of natural gas regulators. Emphasizing hands-on training, this course teaches students to install and adjust regulators. CEU's: 2.1

Students who complete this course will be able to

- Perform maintenance on regulators
- Understand field problems

#### **Prerequisite**

At least one year experience in the field of natural gas regulators is recommended.

#### **Topics**

Self-Operated Regulators | Pilot-Operated Regulators | Overpressure Protection (Series Regulation, Monitors, and Slam Shut Options) | Regulator Failure Analysis | Installation Guidelines

#### Registration

**Price:** \$2100 USD

**Enroll:** Log on to Educational Services <u>MyTraining</u> at <u>www.Emerson.com/education</u>. Enrollments close 2 weeks before the start date of the class.

**Contact:** For more information, contact your Emerson Impact Partner or explore training options at www.Emerson.com/education.

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### **Course 1106: Gas Regulator Troubleshooting**

Choose a hands-on learning platform and train for realworld challenges. 1100 Series: Gas Regulator Technician and Troubleshooting Courses

#### Overview

This 3-day course is designed primarily for technicians responsible for the installation and maintenance of natural gas regulators. Emphasizing hands-on training, this course teaches students to install and adjust regulators. CEU's: 2.1

Students who complete this course will be able to

- Efficiently and safely troubleshoot common regulator operational performance problems
- Understand the influence of the service environment on regulator performance
- Understand the importance of correct installation procedures
- Understand the role of correct sizing as it impacts regulator performance
- Perform maintenance on regulators and troubleshoot field problems

#### **Prerequisite**

Gas Regulator Technician (Course 1100) or two years' experience with regulators.

#### **Topics**

Review Self-Operated and Pilot-Operated Regulator
Fundamentals and Overpressure Protection | Sizing Overview
for Technicians (as requested) | Regulator Troubleshooting
Principles, Procedures, and Best Practices including Failure
Analysis, Stability Issues, Installation Practices, Pilot
Interchangeability Practices, and Advanced Monitor Operations
and Maintenance

#### Registration

Price: \$2100 USD

**Enroll:** Log on to Educational Services <u>MyTraining</u> at <u>www.Emerson.com/education</u>. Enrollments close 2 weeks before the start date of the class.

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## Course 1112: Fisher® LPG-NH<sub>3</sub> Technical Course

## Learn to install, troubleshoot and perform maintenance

#### Overview

This 3-day course is designed primarily for technicians responsible for the installation and maintenance of propane regulators and valves. Emphasizing hands-on training, this course teaches students to install, troubleshoot and adjust regulators as well as service and maintain valves. Students will have the opportunity to perform maintenance, replace components, and check products for performance measures using actual products and pressure. CEU's: 2.1

#### **Topics**

Fundamentals of Self-Operated Regulators (Types: R Series, HSR, CSR Series, 133, 64, 627, and 630) | Fundamentals of Pilot-Operated Regulators (Types: 299H, 99, 1098 and 1098H) | Overpressure Protection, Relief Valves, Sizing, Monitors) | Regulator Failure Analysis (Hands-on workshops with actual pressure and hardware) | Bulk Storage and Transportation Products (C Series Internal Valves, Types N551 and N562/3 ESV's, H Series Relief Valves, Type 63EGLP Relief Valve) | Troubleshooting and Installation of Regulators and Valves

#### Registration

Price: \$250 USD

**Enroll:** Log on to Educational Services **MyTraining** at www.Emerson.com/education. Enrollments close 2 weeks before the start date.

**Contact:** For more information, contact your local LP Distributor or explore training options at www.Emerson.com/education.

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### **Course 1114: PRV University**

Improve your understanding of pressure relief devices from the leader in overpressure protection.

#### **Overview**

This course is designed for those responsible for the sizing, selection, application, and operation of pressure relief devices across industries. Technical expertise is provided to help designers and engineers meet pressure vessel code requirements and attain optimum pressure relief valve performance.

CEU's: 2.1

During this 3-day course, each attendee will receive an engineering handbook containing materials covered in the seminar and a Certificate of Achievement that will contain the name, date, title, and material content of the seminar. This course may be used to fulfill the continuing education requirements for Professional Engineering certifications. Contact the state or local agency in your area to determine if this seminar can be used for your program.

#### **Topics**

Principles of Operation | ASME Pressure Vessel Code
Requirements | API Storage Tank Standards and Recommended
Practices | Advantages and Limitations of PRV Types |
Installation and Applications of Pressure Relief Devices |
Pressure Relief Device Hands-on Circuit | Assembly and Testing
Facility Tour | Operational Demonstrations of Devices at our
ASME Certified Testing Laboratory

#### Registration

**Price:** \$2100 USD

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### **Course 8000: Gas Control Conference**

Improve your workforce skills from the leader in gas production, storage, pipeline, and distribution

#### Overview

This conference is for those responsible for the selection, application and operation of regulators in the natural gas industry. CEU's: 3.2

This 4-1/2 day conference demonstrates the fundamentals of natural gas regulators in gas pressure control. This course emphasizes natural gas distribution and also covers natural gas transmission. Students who complete this conference will be able to

- Evaluate the difference between direct-operated and pilot-operated regulators
- Evaluate the different methods of overpressure protection
- Properly size regulators for natural gas applications
- Troubleshoot a wide variety of regulator types

#### **Prerequisite**

At least one year's experience in the field of natural gas pressure regulation is recommended.

#### **Topics**

Self-Operated Regulator Fundamentals | Pilot-Operated Regulator Fundamentals | Two-Path vs. Unloading Style Pilots Regulator Sizing and Selection | Overpressure Protection Methods | Monitor Methods and Sizing | Sizing and Selection of Relief Valves | Pressure Factor Measurement | Troubleshooting Regulators | Failure Analysis | Recommended Installation Practices | Aerodynamic Noise Theory, Treatment Methods, and Technologies | Hands-On Workshops

#### Registration

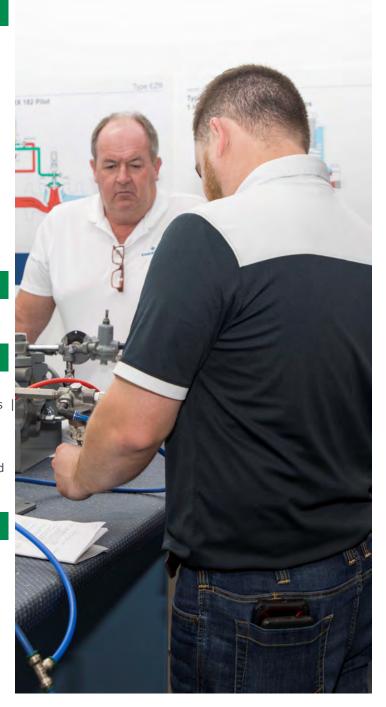
**Price:** \$2100 USD

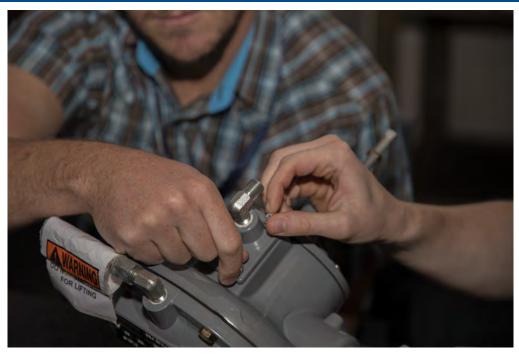
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